



766.21 CIP

PATENT APPLICATION

03CQ1
Box/seq.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

TETSUYOSHI ISHIWATA et al.

Application No : 09/730,559

Filed: December 7, 2000

For: IgA NEPHROPATHY-RELATED
GENES

Examiner: N/Y/A

Group Art Unit: N/Y/A

August 3, 2001

Commissioner for Patents
Washington, D.C. 20231

RESPONSE TO NOTICE TO COMPLY WITH REQUIREMENTS
and
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Sir:

This is in response to the Office Action mailed July 10, 2001 (copy attached). Applicants submit herewith a substitute computer readable form under 37 C.F.R. § 1.821(e). The content of the computer readable form and the Paper Copy of the Sequence Listing filed herewith are the same. No new matter has been added.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/730,559	12/07/2000	Tetsuyoshi Ishiwata	766.21 CIP

CONFIRMATION NO. 9523

FORMALITIES LETTER



OC000000006275848

Date Mailed: 07/10/2001

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DISCLOSURES**

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

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SEQUENCE LISTING

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 Leu Asn Asp Ser Ser His Lys Lys Phe Phe Asp Val Ser Lys Leu Gly
 20 25 30
 acc aag tat gat gtt ctg cct tac tca ata cgg gtc ttg ttg gaa gct 144
 Thr Lys Tyr Asp Val Leu Pro Tyr Ser Ile Arg Val Leu Leu Glu Ala
 35 40 45
 gct gta cga aat tgt gat ggc ttt tta atg aag aag gaa gat gtt atg 192
 Ala Val Arg Asn Cys Asp Gly Phe Leu Met Lys Lys Glu Asp Val Met
 50 55 60

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Asn Ile Leu Asp Trp Lys Thr Lys Gln Ser Asn Val Glu Val Pro Phe	
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Phe Pro Ala Arg Val Leu Leu Gln Asp Phe Thr Gly Ile Pro Ala Met	
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Val Asp Phe Ala Ala Met Arg Glu Ala Val Lys Thr Leu Gly Gly Asp	
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Pro Glu Lys Val His Pro Ala Cys Pro Thr Asp Leu Thr Val Asp His	
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Val Gln Pro Lys Lys Leu Pro Cys Arg Gly Gln Thr Thr Cys Arg Gly	
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Gln Ile Glu Asn Thr Pro Ile Leu Cys Pro Phe His Leu Gln Pro Val	
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aataactggg tgggttactt gatagtataa taacc 155

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<213> Homo sapiens

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<223> A or G or C or T

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aggtccatcc agaaattggc ttcaaaagag gaatcttcta attctagtga cagtaaataca 180

cagagccgga gacatttgct agccaaggaa agaagggaaa tgaaaaagaa aaaacttcca 240

agtgactcag gagattttaga agcgtttagag ggaaagga 278

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 <213> Homo sapiens

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 attttgagat aattagacaa gacagttag catttacaag aacaagtttg gcagttgaag 180
 aatctattta tatgact 197

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 <211> 137
 <212> DNA
 <213> Homo sapiens

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 gttcagtcct ggtctct 137

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 <211> 274
 <212> DNA
 <213> Homo sapiens

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 aggtaagagg aaaacttcct atattctgaa acagcctaac attttacaaa attttagttt 180

 tcttttttag agtcttatcc tgtagctata taacagttca tgtctgattt agcatttggt 240

 cacgagtaaa gctggaacta tgaaaattga aaat 274

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 <211> 171
 <212> DNA
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<220>
 <221> unsure
 <222> (72), (127), (150)
 <223> A or G or C or T

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 <211> 161
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<213> Homo sapiens

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aattcctagc ccaagaagaa tataatgta aaactggta tgtaattttt gtgcctctcc 120

ttttaatgc agtatattagt tcagatgttg gcgatttttc a 161

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<212> DNA

<213> Homo sapiens

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ttagccctat atttgggggtt tggatgtcca ctgtgctggt tcccagagat agtaagggga 180

tgagagtatt ggttacatct cctgaccac atacttaaga tccagatgaa caagacagtt 240

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<211> 138

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 191

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<213> Homo sapiens

093039-080604

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<211> 148

<212> DNA

<213> Homo sapiens

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tccagatcat agtaagaaac tctgggct 148

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<211> 306

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<213> Homo sapiens

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ttaatcatac tccagtcgtt tcacaatgca ttctaatagc agcgggatca gaacagtact 240

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<211> 357

<212> DNA

<213> Homo sapiens

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atgaggtatt tgttgataaa taattcatca atttccacaa tgcagacaaa aatgtctgcc 240

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<211> 219

<212> DNA

<213> Homo sapiens

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<211> 251

<212> DNA

<213> Homo sapiens

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 actccaacta caaacaatgc aaagtagtgc tcctcagtat tattttttgca attgttagta 120
 atgttaagca tcaaggaaaa taaaacacat cattgcacat tacagccgca aaaaac 176

<210> 28
 <211> 241
 <212> DNA
 <213> Homo sapiens

<400> 28
 agagagtaaa gcaagctatt ttgacagcaa cctaataaca gctgtcttct tccacttctt 60
 ggctaactca tccccagat agccttcttt tctcttatca attccctggt gcaacaataa 120
 taaatgccac acctgatgga gtcattaggc actttcctag tgacaagtgc ctaggacaga 180
 ggagaaaaca aagaaacact gacaaccact gaaaactgac atatcaggcc aggcattgtca 240
 c 241

<210> 29
 <211> 217
 <212> DNA
 <213> Homo sapiens

<400> 29
 gctggagagg tggatgatgtt gctgaataat tgcttttttaa agctggaggg gacttccaag 60

agtctctcat ttaagaaraa aaattaaaga cataattggt aacgggttttg actgctgcag 120

aggcaacact ttgctcacia tcctacagat ctacttcacc tgtaactaca attttcctga 180

agacatagaa gaaaaatcaa ttgttctaata ccatatg 217

<210> 30

<211> 233

<212> DNA

<213> Homo sapiens

<400> 30

aatcttagca taatgcttcc tgggaaattc tgaaattgat tccattttctg ccgttacaaa 60

cacacacgaa gttcctagtt cactgggact tcctgatttg ttcttttagc ttgctccttc 120

tcacctagaa gctctgttta tttctgagca accctggggc ttgtctcata ggacaggatt 180

tatttatctc atcaaggctg agtgtgcctt aggaagtcata aaacataaaa aga 233

<210> 31

<211> 228

<212> DNA

<213> Homo sapiens

<400> 31

tatagacagg gtagggacga ttagcccctc gacaactttt caciaatata cacacgttta 60

actacctctc aggtcatgat aaagaccggc cgggcagaaa cactgtaatc ccagctactc 120

gggagcctga ggcatgagaa tcacttgaac ctgggaggtg gaggttgcca tgagccgaga 180

tcacgccatt gcactacagc ctgggcgaca agagtgaaac tccatctg 228

09730350-050604

195					200					205					
Phe	Val	Gln	Leu	Gln	His	Gly	Glu	Ile	Asp	Lys	Arg	Val	Ser	Leu	Ile
210					215					220					
Leu	His	Phe	Gly	Lys	Phe										
225					230										
<210> 35															
<211> 143															
<212> PRT															
<213> Homo sapiens															
<400> 35															
Met	Gly	Ser	Asp	Lys	Arg	Val	Ser	Arg	Thr	Glu	Arg	Ser	Gly	Arg	Tyr
1		5			10					15					
Gly	Ser	Ile	Ile	Asp	Arg	Asp	Asp	Arg	Asp	Glu	Arg	Glu	Ser	Arg	Ser
20				25					30						
Arg	Arg	Arg	Asp	Ser	Asp	Tyr	Lys	Arg	Ser	Ser	Asp	Asp	Arg	Arg	Gly
35			40				45								
Asp	Arg	Tyr	Asp	Asp	Tyr	Arg	Asp	Tyr	Asp	Ser	Pro	Glu	Arg	Glu	Arg
50		55			60										
Glu	Arg	Arg	Asn	Ser	Asp	Arg	Ser	Glu	Asp	Gly	Tyr	His	Ser	Asp	Gly
65		70			75					80					
Asp	Tyr	Gly	Glu	His	Asp	Tyr	Arg	His	Asp	Ile	Ser	Asp	Glu	Arg	Glu
85				90					95						
Ser	Lys	Thr	Ile	Met	Leu	Arg	Gly	Leu	Pro	Ile	Thr	Ile	Thr	Glu	Ser
100			105					110							
Asp	Ile	Arg	Glu	Met	Met	Glu	Ser	Phe	Glu	Gly	Pro	Gln	Pro	Ala	Asp
115		120					125								
Val	Arg	Leu	Met	Lys	Arg	Lys	Thr	Gly	Glu	Ser	Leu	Leu	Ser	Ser	
130		135					140								

<210> 36
<211> 104
<212> PRT

<213> Homo sapiens

<400> 36

Met Pro His Met Leu Ser Gln Leu Ile Ala Gly Gly Val Ser Thr Ser
1 5 10 15

Cys Val Thr Ala Leu Gly Glu Glu Thr Gly Ala Trp Phe Pro Val Tyr
20 25 30

Leu Ser His Ala Ser Ser Pro Phe Ala Asp Leu Val Phe Cys Pro Phe
35 40 45

Ala Glu Ile Asn His Ser Gln Glu Tyr Asp Asn Met Arg Gly Pro Val
50 55 60

Ser Pro Pro Asn Lys Gln Phe Asn Leu Gly Val Ile Phe Gly Ile Pro
65 70 75 80

Asn Asn Cys Arg Phe Pro Thr Asp Asn Lys Ile Thr Glu Lys Gln Leu
85 90 95

Leu Gly Asn Val Leu Asn Tyr Pro
100

<210> 37

<211> 133

<212> PRT

<213> Homo sapiens

<400> 37

Met Asn His Pro Trp His Val Cys Phe Leu Phe Lys Val Leu Arg Tyr
1 5 10 15

Tyr Pro Thr Ala Pro Ile Leu Lys Trp Thr His Thr Val Ser Cys Ser
20 25 30

Trp Cys Arg Ser Val Leu Arg Glu Val Val Gly Asn Val Ser Leu Ser
35 40 45

Glu Asn Phe Thr Ile Ser Ala Phe Cys Pro Glu Leu Thr Pro Phe Pro
50 55 60

Asp Gln Gly Thr Ser Thr Met Ile Ser Phe Leu Glu Lys Phe Asn Lys
65 70 75 80

093059.080601

Ser Lys Arg Glu Arg Leu Glu Leu Met Leu His Phe Tyr Ser Val Leu
85 90 95

Ser Leu Glu Pro Ala Val Ala Glu His Trp Ser Gly Glu Phe Glu Lys
100 105 110

Trp Lys Val Gly Phe Phe His Pro Leu Lys Arg Glu Asp Gly Phe Phe
115 120 125

Thr Arg Thr Asp Ile
130

<210> 38

<211> 133

<212> PRT

<213> Homo sapiens

<400> 38

Met Asn His Pro Trp His Val Cys Phe Leu Phe Lys Val Leu Arg Tyr
1 5 10 15

Tyr Pro Thr Ala Pro Ile Leu Lys Trp Thr His Thr Val Ser Cys Ser
20 25 30

Trp Cys Arg Ser Val Leu Arg Glu Val Val Gly Asn Val Ser Leu Ser
35 40 45

Glu Asn Phe Thr Ile Ser Ala Phe Cys Pro Glu Leu Thr Pro Phe Pro
50 55 60

Asp Gln Gly Thr Ser Thr Met Ile Ser Phe Leu Glu Lys Phe Asn Lys
65 70 75 80

Ser Lys Arg Glu Arg Leu Glu Leu Met Leu His Phe Tyr Ser Val Leu
85 90 95

Ser Leu Glu Pro Ala Phe Ala Glu His Trp Ser Gly Glu Phe Glu Lys
100 105 110

Trp Lys Val Gly Phe Phe His Pro Leu Lys Arg Glu Asp Gly Phe Phe
115 120 125

Thr Arg Thr Asp Ile
130

0930539.030601

Ala	Val	Arg	Asn	Cys	Asp	Gly	Phe	Leu	Met	Lys	Lys	Glu	Asp	Val	Met	
	50					55						60				
Asn	Ile	Leu	Asp	Trp	Lys	Thr	Lys	Gln	Ser	Asn	Val	Glu	Val	Pro	Phe	
65					70					75					80	
Phe	Pro	Ala	Arg	Val	Leu	Leu	Gln	Asp	Phe	Thr	Gly	Ile	Pro	Ala	Met	
				85					90					95		
Val	Asp	Phe	Ala	Ala	Met	Arg	Glu	Ala	Val	Lys	Thr	Leu	Gly	Gly	Asp	
			100					105					110			
Pro	Glu	Lys	Val	His	Pro	Ala	Cys	Pro	Thr	Asp	Leu	Thr	Val	Asp	His	
		115					120					125				
Ser	Leu	Gln	Ile	Asp	Phe	Ser	Lys	Cys	Ala	Ile	Gln	Asn	Ala	Pro	Asn	
	130					135					140					
Pro	Gly	Gly	Gly	Asp	Leu	Gln	Lys	Ala	Gly	Lys	Leu	Ser	Pro	Leu	Lys	
145					150					155					160	
Val	Gln	Pro	Lys	Lys	Leu	Pro	Cys	Arg	Gly	Gln	Thr	Thr	Cys	Arg	Gly	
				165					170					175		
Ser	Cys	Asp	Ser	Gly	Glu	Leu	Gly	Arg	Asn	Ser	Gly	Thr	Phe	Ser	Ser	
			180					185					190			
Gln	Ile	Glu	Asn	Thr	Pro	Ile	Leu	Cys	Pro	Phe	His	Leu	Gln	Pro	Val	
		195					200					205				
Pro	Glu	Pro	Glu	Thr	Val	Leu	Lys	Asn	Gln	Glu	Val	Glu	Phe	Gly	Arg	
	210					215					220					
Asn	Arg	Glu	Arg	Leu	Gln	Phe	Phe	Lys	Trp	Ser	Ser	Arg	Val	Leu	Lys	
225				230						235					240	
Asn	Val	Ala	Val	Ile	Pro	Pro	Gly	Thr	Gly	Met	Ala	His	Gln	Ile	Asn	
				245					250					255		
Leu	Glu	Tyr	Leu	Ser	Arg	Val	Val	Phe	Glu	Glu	Lys	Asp	Leu	Leu	Phe	
			260					265					270			
Pro	Asp	Ser	Val	Val	Gly	Thr	Asp	Ser	His	Ile	Thr	Met	Val	Asn	Gly	
		275				280						285				
Leu	Gly	Ile	Leu	Gly	Trp	Gly	Val	Gly	Gly	Ile	Glu	Thr	Glu	Ala	Val	

290		295		300
Met Leu Gly Leu Pro Val Ser Leu Thr Leu Pro Glu Val Val Gly Cys				
305		310		315 320
Glu Leu Thr Gly Ser Ser Asn Pro Phe Val Thr Ser Ile Asp Val Val				
	325		330	335
Leu Gly Ile Thr Lys Val Ser				
	340			

<210> 41
 <211> 305
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (53), (54), (55), (56), (57), (58)
 <223> A or G or C or T

<400> 41
 tcatgaagtg aagccaactg tttagactag aatggttatga gattaaaccc acnnnnnnntt 60
 attcatagac ataaaccctc attttaatta gtggatctgg atttttgtca tatgtggaat 120
 cataatttaa acaaaatcaa ctaagatgat ccaagttcca cacaactgca cttcaatatt 180
 caagtcggtg tgaagatgcc tgactactgc gtcacaagat tctgagctgt cgtaaaaagc 240
 ctggctcgtg gtttctatatt atagtgtaca catggttgggt tataatcaca aacctggaac 300
 tctgt 305

<210> 42
 <211> 256
 <212> DNA
 <213> Homo sapiens

<400> 42
gaaaccacgg cttacaccta gagacagcat tcagatatag acgggatact tgtgttagtc 60

agttccttta taacaggtga atctctctcc cactgcttca acactgcgtg acaaagccaa 120

ttgggaagca gctttacaaa tgtgacttga cttggggatc ttcttgatac ttgccaatgg 180

caaggaacaa gccgcctgaa ctaaattgcca ctccatttga ttccacgctt aaagtaacca 240

tgcaaccgac tatagt 256

<210> 43
<211> 244
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (227), (237)
<223> A or G or C or T

<400> 43
tactcttcaa ccatgatattt tctctgatgg cctgtgtgaa cagattaatg gtgtccatct 60

aatccttcc cactggggg aaagcaaata atcaggccca ttgcaaaaac tgctcttggt 120

tgagcttcct gccttaaata ataccacag tgaatggcgt ccctttatca ccgctaata 180

ctctgacatc tctctccact cacatgtgag cctcctcagc tctcganaaa caagtcngtc 240

tcgg 244

<210> 44
<211> 258

<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (39), (40), (41)
<223> A or G or C or T

<400> 44
tctcagaaaa ctccagatca aatgagatga gtatggtggn nagggctggc aattagagga 60

tactctccaa tggatgatgaa gggagatgtc tgggggaaat ccagcaggat gttgatttag 120

tatgtacaca gtgagaggat acttgtagag aacctagaat cttctctgaa tgtgacgggc 180

cctcagagat aattgttaac agataagtgg atgattaaat acacttcctc cagtaggcta 240

gatgttaaga cggagatc 258

<210> 45
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 45
gggcttaata ttattcatag atcgag 26

<210> 46
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

“SEQUENCE”

<210> 54
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Synthetic DNA

<400> 54
 gattcttcaa ctgccaaact tgttc

25

<210> 55
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Synthetic DNA

<400> 55
 gctgatgctt ttctatctga cttc

24

<210> 56
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Synthetic DNA

<400> 56
 gaccaggact gaacagaggt ga

22

<210> 57
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 57

gcttatagac catgtttgta gtagg

25

<210> 58

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 58

gtgaacaaat gctaaatcag acatg

25

<210> 59

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 59

gccacggggtt tcccatatcg aa

22

<210> 60

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 60

gactatactt aggaacctct gcaa

24

109030-590E260

<400> 64
ggagtgaaaa ctgtcttggt catc

24

<210> 65
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 65
gtatgacaaa tagtttctgc ctgat

25

<210> 66
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 66
gattaacaaa gatgtacaga ctgag

25

<210> 67
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 67
gagacagcat tcagatatag acgg

24

<210> 68
<211> 22

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 68
gcgtggaatc aaatggagtg gc

22

<210> 69
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 69
gatggcctgt gtgaacagat taat

24

<210> 70
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 70
gagagagatg tcagagtcac tagc

24

<210> 71
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 71

gatccccaca atttcttgtg attg

24

<210> 72

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 72

gttcccctaa aataatgtgg taatg

25

<210> 73

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 73

gaggatactc tccaatggtg atg

23

<210> 74

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 74

gtcttaacat ctagcctact ggag

24

<210> 75

<211> 24

<212> DNA

093035-00001
109080-650E260

<210> 79
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Synthetic DNA

<400> 79
 gctatctacc tggcaggaaa agag

24

<210> 80
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Synthetic DNA

<400> 80
 gagtttctta ctatgatctg gattc

25

<210> 81
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Synthetic DNA

<400> 81
 gcaaaatgta ctcagcttca atcac

25

<210> 82
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 82

gtaaatgcag tactgttctg atcc

24

<210> 83

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 83

gaatgcttca ttctcattgt ttaagg

26

<210> 84

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 84

gtcactagga ttccacagaa cttc

24

<210> 85

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 85

gaggtagggc ttcccttcgc ta

22

<210> 86
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 86
gcataacaag tgacagggtt agtta

25

<210> 87
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 87
ggtgctcctt ccttacactg gt

22

<210> 88
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 88
gactacacat aaacccaccc cag

23

<210> 89
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 89
gggtacagga tttctaagaa gtgg

24

<210> 90
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 90
ggagaaaatt tcagctcatc tgaag

25

<210> 91
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 91
gctgaagtta agcattaata cgcc

24

<210> 92
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 92
gcggctgtaa tgtgcaatga tgt

23

<210> 93
<211> 24

003059-030601
T09020-6590E460

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 93

gacagcaacc taataacagc tgtc

24

<210> 94

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 94

gtcctaggca cttgtcacta gg

22

<210> 95

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 95

gaggggactt ccaagagtct ct

22

<210> 96

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 96

109980-599E-60

gtcttcagga aaattgtagt tacag

25

<210> 97

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 97

gttacaaaca cacacgaagt tcct

24

<210> 98

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 98

gacttcctaa ggcacactca gc

22

<210> 99

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 99

gtttaactac ctctcaggtc atga

24

<210> 100

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 100

gtcgccaagg ctgtagtgca at

22

<210> 101

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 101

gaaataggta tcccttgatg tcga

24

<210> 102

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 102

gaccaagaat tcagttcatc agtt

24

<210> 103

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

<400> 103

gaatgaacca gagccaggac ag

22

109039-550E260

<210> 104
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Synthetic DNA

<400> 104
 gccttgatg tatgcctgtg cc

22

<210> 105
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Synthetic DNA

<400> 105
 aagagtccac caggccatgg a

21

<210> 106
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:Synthetic DNA

<400> 106
 taccttgatg acttctagct gag

23

<210> 107
 <211> 17
 <212> DNA
 <213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 107
gtttttttttt tttttta

17

<210> 108
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 108
gtttttttttt ttttttg

17

<210> 109
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 109
gtttttttttt ttttttc

17

<210> 110
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 110
cagagtgatg gatatcaa

18

<210> 111
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 111
atgaaagtgc cagtgtgcca tg

22

<210> 112
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 112
cccatcacca tcttccagga gc

22

<210> 113
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic DNA

<400> 113
ttcaccacct tcttgatgtc atcata

26

<210> 114
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic Peptide

<400> 114

Cys Pro Leu Lys Arg Glu Asp Gly Phe Phe Thr Arg Thr Asp Ile
1 5 10 15

<210> 115

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD_RES

<222> (16)

<223> AMIDATION, GluAmide

<400> 115

Cys Ser Phe Leu Glu Lys Phe Asn Lys Ser Lys Arg Glu Arg Leu Xaa
1 5 10 15

<210> 116

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD_RES

<222> (15)

<223> AMIDATION, GlyAmide

<400> 116

Cys Ala Glu His Trp Ser Gly Glu Phe Glu Lys Trp Lys Val Xaa
1 5 10 15

<210> 117

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic Peptide

<400> 117

Cys Glu Ile Asp Lys Arg Val Ser Leu Ile Leu His Phe Gly Lys Phe
1 5 10 15

103030-6500E-60

<210> 118
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic Peptide

<400> 118
Cys Arg Leu Met Lys Arg Lys Thr Gly Glu Ser Leu Leu Ser Ser
1 5 10 15

<210> 119
<211> 14
<212> PRT
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Cys Ser Ala Glu Thr Ala Pro Gly Val His Lys Arg Tyr Phe Arg Xaa
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<220>

<223> Description of Artificial Sequence:Synthetic Peptide

<400> 121

Cys Lys Ile Thr Glu Lys Gln Leu Leu Gly Asn Val Leu Asn Tyr Pro
1 5 10 15

1 / 101

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